HW#5A: Midpoint

Geometry

Due Date: Thursday, Sept. 25th, 2014

**Failure to show work on all problems or use complete sentences will result in a LaSalle.**

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| 1. Find the coordinates of the midpoint of the segment with the given endpoints.  a. R(3, 1) and S(3, 7)  b. V(2, 4) and W(6, 6) | 2. The endpoints of QR are *Q*(–5, 1) and *R*(6, 5).  a. Graph the coordinates.    b. Find the coordinates of the midpoint *M*. |
| 3. Find the midpoint of the segment *QP*. | 4. Points *W*, *X*, *Y*, and *Z* are collinear. *WZ* = 40, *XZ* = 18, and *Y* is the midpoint of *XZ.* What is the length of *XY*?  W X Y Z |
| 5. Find the indicated length.    a. DE  b. AB  c. AC  d. BD  e. CE  f. BE | 6. On a number line, point Q is located at 10, point R is located at -5, and point S is located at -13.   1. Draw a number line.      1. Find the length of QS. 2. Find the length of RS.      1. How much longer is Segment QS than RS? |

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| 7. Given the two points (- 2, - 1) and (4, 5), calculate the slope of the line. | 8. Find the slope from these two points: |
| 9. What is the slope of  if A(0, -2) and B(2, -2)?  *Is this a line or a line segment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* | 10. What is the slope of  if C(5, - 4) and  D( 5, 2)?  *Is this a line or a line segment?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |
| 11. Write an equation to represent the graph below.    Y-Int: \_\_\_ / Slope: \_\_\_ / Equation: \_\_\_\_\_\_\_\_\_\_\_ | 12. Write an equation to represent the graph below.    Y-Int: \_\_\_ / Slope: \_\_\_ / Equation: \_\_\_\_\_\_\_\_\_\_\_ |